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DIVISION: 09—FINISHES

Section: 09270—Gypsum Board Accessories

REPORT HOLDER:

ITW TACC POLYURETHANE CENTER 195 DEMILLE ROAD LAPEER, MICHIGAN 48446 (248) 628-2587 www.itwfoamseal.com

EVALUATION SUBJECT:

FOAMSEAL F-2100 ADHESIVE

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2003 International Building Code® (IBC)
- 2003 International Residential Code® (IRC)
- 1997 Uniform Building CodeTM (UBC)
- 1999 Standard Building Code[®] (SBC)
- BOCA® National Building Code/1999 (BNBC)

Properties evaluated:

Gypsum board attachment

2.0 USES

Foamseal F-2100 is used as an alternative to mechanical fasteners to attach gypsum board to interior wood-framed interior partitions and ceilings.

3.0 DESCRIPTION

Foamseal F-2100 is a two-part polyurethane foam plastic structural adhesive with two components called F-2100A and F-2100B. The adhesive components are available in 55-gallon (208 L) drums and are mixed at a ratio of 1:1 (by volume). When stored in original unopened containers at temperatures between 70°F and 105°F (21°C and 40°C), the product has a shelf life of six months.

4.0 INSTALLATION

The gypsum board (conforming to ASTM C 36 and C 1395) and wood framing surfaces shall be clean, dry, and dust-free, and have a surface temperature of 50°F (10°C) or higher. Foamseal F-2100 is applied using a high-pressure impingement mixing spray gun recommended by ITW TACC, in accordance with Foamseal installation instructions. Adhesive temperature at application shall be between 100°F and 120°F (38°C and 49°C). The adhesive components react and harden in approximately two minutes, during which time the adhered parts shall not be moved. At an ambient

temperature of 70°F (21°C), full cure of the adhesive takes place after 24 hours. Horizontal wood members shall be spaced no more than 24 inches on center (610 mm) and no less than 8 inches on center (203 mm), and vertical wood framing members shall be spaced no more than 16 inches on center (406 mm).

F-2100 Foamseal shall be applied along prepositioned framing members at a 90-degree framing-to-gypsum-board interface using a fillet-bead of adhesive measuring a minimum of 1 inch (25 mm) to a maximum of $1^3/_8$ inches (35 mm) wide by a minimum of $3^1/_4$ inch (19 mm) to a maximum of $1^1/_8$ inches (29 mm) high at all framing members. See Figure 1 of this report for details. The adhesive shall be applied continuously along one side of the interface formed by the framing member and the gypsum board, and continuously along both sides of the interface at locations where gypsum boards abut to form a joint on the framing members.

5.0 CONDITIONS OF USE

The Foamseal F-2100 adhesive described in this report complies with those codes specifically listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 The adhesive shall be installed per manufacturer's published installation instructions and this report. A copy of the manufacturer's installation instructions shall be available at the assembly area at all times during construction.
- 5.2 Adhesive use and application is limited to prefabricated construction. The use of Foamseal F-2100 adhesive for field applications is outside the scope of this report.
- 5.3 The use of adhesive to attach gypsum board in a fireresistance rated assembly is outside the scope of this report.
- 5.4 The adhesive shall not be used in installations where a vapor barrier is required between the gypsum board and wood framing.
- 5.5 F-2100 Foamseal adhesive is manufactured by ITW TACC at its Lapeer, Michigan, manufacturing facility, under a quality control program with inspections by Progressive Engineering Inc. (AA-699).
- 5.6 Application of the Foamseal F-2100 is limited to gypsum board manufactured in accordance with ASTM C 36. Application of the adhesive to water-resistant or foilbacked gypsum boards is outside the scope of this report. All other applications are outside the scope of this report.
- 5.7 Use of the adhesive in resisting in-plane loads is beyond the scope of this report.

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6.0 EVIDENCE SUBMITTED

- **6.1** Data in accordance with the ICC-ES Acceptance Criteria for Two-part Polyurethane Adhesives Used to Attach Gypsum Board to Wood Framing (AC223), dated February 2004.
- **6.2** Installation Instructions.
- **6.3** A quality control manual.

7.0 IDENTIFICATION

Containers of Foamseal adhesive shall be identified with labels bearing the manufacturer's name (ITW TACC) and address, product designation (F-2100), evaluation report number (ESR-1028), the name of the inspection agency (Progressive Engineering Inc.) and details on shelf life.

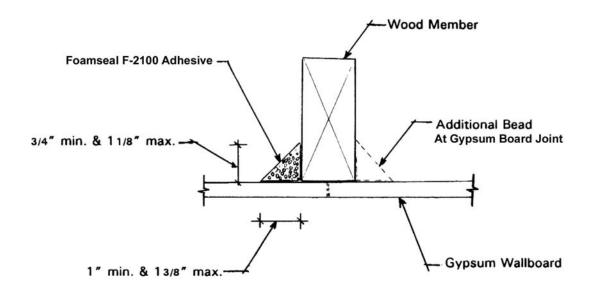


FIGURE 1